Vermont State Hospital Futures
Inpatient Options Analysis

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Over the past five decades, treatment of mental illness has changed profoundly, often in response to specific thresholds of new knowledge. Our health system is increasingly recognizing that general health is not, and cannot be, separated from mental health. The locus of mental health service settings has moved from restrictive, involuntary institutions to service based in the community. The treatment of acute mental illness is increasingly integrated with medical and general inpatient services. The goals of treatment have shifted from providing custodial care to the provision of active treatment and rehabilitation services to help individuals live productive lives and achieve recovery. The Vermont State Hospital Futures initiative will move Vermont further in this direction.

The Futures Project

The goals of the Futures project are to create new inpatient programs to enhance psychiatric inpatient care and replace the functions currently performed by Vermont State Hospital. In addition, this project will create new community mental health service capacities to reduce Vermont's reliance on involuntary inpatient psychiatric care. The over-all aim is to move mental health service delivery as a whole toward the vision of the transformed system and integrated system of health care services.

Policy and Planning Context

The replacement of Vermont State Hospital (VSH) service will take place within the context of the system's transformation towards care that is more integrated with the rest of medical care, and that emphasizes reduced reliance on inpatient care.

The plan to develop new inpatient and community programs to replace the current VSH has been developed by a multi-stakeholder advisory committee that has met for over two years. The core policy considerations driving this concept are:

- Integration of psychiatric inpatient care with general inpatient care to improve clinical services and reduce the stigma and isolation currently associated with care at VSH,
- To co-locate all of Vermont's tertiary-level psychiatric inpatient care with Vermont's only tertiary hospital,
- To help insure the financial sustainability and affordability of the service by securing federal participation in the ongoing operating costs of the program, and
- To develop new community capacities to reduce Vermont's reliance on inpatient care and to further develop the infrastructure of voluntary, community treatment and support capacities.

Inpatient Partner Option Analysis

Within the scope of the overall policy framework established by the Futures Advisory Committee, the General Assembly, and the Douglas Administration, an analysis of the options for inpatient partners was conducted using the following considerations:

- Identification of which inpatient programs could add new psychiatric beds
- Consideration of costs including ongoing federal reimbursement for inpatient services
- Interest of the potential partner(s) to provide specialized inpatient psychiatric care
- Feasibility of program development including experience, ability to attract and retain staff, and necessary critical mass to develop a strong program.

1. Critical Access Hospital Designation Limitation

The first consideration in identifying which of Vermont's 14 acute care hospitals could add significant psychiatric bed capacity (10 + beds) to replace existing VSH beds is whether the hospital is a Critical Access Hospital and thus limited to a total of 25 acute care and 10 "distinct part" specialized beds. Currently eight (8) Vermont hospitals are Critical Access Hospitals:

- Copley Hospital
- Gifford Medical Center
- Grace Cottage Hospital
- Mt. Ascutney Hospital and Health Center
- North Country Health System
- Northeastern Vermont Regional Hospital
- Porter Medical Center
- Windham Center in Springfield.

Springfield Hospital has a 10-bed psychiatric program so can expand no further. In principle, the seven other critical access hospitals could each develop a 10-bed psychiatric program. These hospitals have expressed little or no interest in developing new 10-bed psychiatric programs at the specialized or intensive level care needed to replace VSH. It would realistically be difficult for these hospitals to develop the depth of programming and staffing required to serve the patient population from VSH and to do so at the relatively small scale of 10 beds.

2. Vermont's Community Hospitals

Six general hospitals could be potential candidates to add psychiatric beds to replace VSH bed capacity: Brattleboro Memorial Hospital, Central Vermont Medical Center, Fletcher Allen Health Care, Northwestern Medical Center, Rutland Regional Medical Center and Southwestern Vermont Health Care. The Table below provides information on staffed bed capacity for these hospitals.

Vermont's Community Hospitals (non-critical access)

Table 1
Staffed Bed Capacity: Community Hospital Inpatient Beds – 2005

Hospital	Staffed Psych Beds	Total Acute Care Staffed Beds
Brattleboro Memorial Hospital	0	47
Central Vermont Medical Center	15	94
Fletcher Allen Health Care	28	430
Northwestern Medical Center	0	70
Rutland Regional Medical Ctr	19	104
Southwestern VT Health Care	0	80

Source: Health Resource Allocation Plan, Section Three, Chapter 1, Inpatient Services, Table 1: Community Hospital Inpatient Beds 2005, p 7.

Three (3) of the hospitals currently have licensed staff psychiatric bed capacity: Central Vermont, FAHC, and RRMC. Central Vermont Hospital has consistently stated that they have no plans to change or further develop their existing inpatient psychiatric program.

The consideration of expressed interest aside, it is important to determine which of the six (6) hospitals would be viable candidates to increase their psychiatric bed capacity. The overall total licensed acute care bed capacity and average daily census potentially create risk of triggering exclusion of Medicaid payments for psychiatric services when new psychiatric beds are added to the facility.

3. The Institution for Mental Diseases (IMD's) Trigger

a. The IMD and Provider-Based Considerations

Two mutually exclusive, but often confused, federal regulations exist which relate to options for relocating inpatient services provided at VSH as outlined in the Vermont State Hospital Futures Plan. These regulations guide:

I. Federal Medicaid payments to *Institutions for Mental Diseases* (IMD's)
II. Organizational configurations that general hospital psychiatric units must attain *Provider-Based Status* by CMS for the purpose of receiving Medicaid and Medicare payments for inpatient psychiatric care.

Both regulations are important with respect to Vermont's need to identify VSH alternatives consistent with the policy framework established by the Futures Advisory Committee, the General Assembly and the Administration. The important policy consideration related to the inpatient portion of the Futures Plan agreed upon by the VSH Futures Advisory Committee is:

- Provide inpatient services in a manner consistent with Vermont's policy of integrating mental health and general health care services so that hospitalized

individuals can have their psychiatric as well as physical health needs met in or near a tertiary care hospital

- Ensure the economic viability of inpatient psychiatric services by maximizing the potential for Medicaid payment (specifically federal financial participation) for the psychiatric inpatient care of adults between the ages of 21 and 65.

b. Exclusion of Medicaid Payments for Institutions for Mental Disease (IMD)

Since its enactment in 1965, federal Medicaid law has excluded from Federal Financial Participation (FFP) payments for Institutions for Mental Disease[1] such as the Vermont State Hospital. This "*Medicaid IMD exclusion*" prohibits Medicaid payments to IMD's for services provided to individuals between the ages of 21 and 65. An Institution for Mental Disease is defined as

> "a hospital, nursing facility, or other institution of more than 16 beds, that is primarily engaged in providing diagnosis, treatment, or care of persons with mental disease, including medical attention, nursing care and related services"[2].

The Centers for Medicare and Medicaid Services (CMS) has specific regulatory criteria for determining if a facility is an IMD. If any of these is met, the facility is most likely an IMD in the eyes of CMS. These criteria appear in 42 CFR § 4390.C.2 and can be summarized as follows:

1. The facility is licensed as a psychiatric facility
2. The facility is accredited as a psychiatric facility
3. The facility is under the jurisdiction of the State's mental health authority
4. The facility specializes in psychiatric/psychological care
5. The current need for institutionalization for more than 50% of all patients in the facility results from mental disease

Medicaid does *not* exclude payments for individuals hospitalized in psychiatric units within general hospitals provided that "the current need for institutionalization of more than 50% of all patients does not result from mental disease".

The obvious alternative to the creation of an IMD would be locating the new inpatient unit in, near, or as a satellite of, an existing general hospital. Such an arrangement, often referred to as *"provider-based status"* offers distinct advantages but it is subject to CMS regulations that define the conditions under which a unit can be deemed *"provider-based"* and receive Medicaid and Medicare payments.

[1] 42 U.S.C. § 1396d
[2] 42 U.S.C. § 1396d(i)

c. Provider-Based Status

The CMS criteria and procedures for determining whether a facility or organization is *provider-based* are set out in 42 CFR § 413.65. If Vermont chooses to pursue the option of locating inpatient alternatives to VSH in a host general hospital (also referred to as the main provider), it would be necessary for the new or expanded psychiatric unit or facility to conform to these criteria *as well as* avoid being deemed a free-standing IMD by CMS under 42 CFR § 4390.C.2 as discussed above.

The CMS general requirements for determining *provider-based status* relate both to facilities that are *on-campus* as well as those that are satellites, or *off-campus,* as defined below. The requirements generally require that the unit or facility be integrated with and clearly part of the main provider and not be an organizational artifact created to maximize federal reimbursement. A summary of the general requirements follows:

- Licensure: the proposed provider and the main provider must be operated under the same license, except where the State requires a separate license
- Clinical Services: the clinical services of the proposed unit and the host hospital must be integrated as defined in the regulations
- Financial Integration: The financial operations of the facility or unit must be fully integrated within the financial system of the main provider, as evidenced by shared income and expenses.
- Public Awareness: The facility organization seeking provider-based status is held out to the public and other payers as part of the host provider.

In addition to the general requirements that must be met to attain *Provider-based Status*, CMS also defines *on-campus* and *off-campus* facilities and specifies the physical and organizational criteria that apply to each for the purpose of determining if either is provider-based. *On-campus* is defined as the physical area immediately adjacent to the host provider's main buildings, and other areas and structures that are not strictly contiguous to the main buildings but are located within 250 yards of the main buildings.

In order to be considered an o*ff-campus* facility, the unit must conform to the following:

- The *off-campus* facility or organization seeking provider-based status must be operated under the ownership and control of the main provider
- The reporting relationships between the *off-campus* facility or organization seeking provider-based status and the main provider must have the same frequency, intensity and level of accountability that exists in the relationship between the main provider and one of its existing departments
- The *off-campus* facility or organization must be located within a 35-mile radius (straight line) of the main provider with limited exceptions set out in the regulations.
- A facility operating under a management contract with the host facility must also meet these *of-campus* requirements

d. Financial Significance of IMD Risk

Public payers (Medicare, Medicaid, and State General Funds) are the major source of funding for Vermont's mental health services. Virtually all (97%) of the revenues for the Vermont State Hospital are realized from General Fund payments. Public funds also support approximately 60% of mental health inpatient services provided by Vermont's community and tertiary care hospitals. Some 28% of this amount is paid by Medicaid.

e. Predicted Risk of IMD Trigger for Six Hospitals

Table 2 illustrates the potential long range risk of adding psychiatric beds to general hospitals.

The difference between the third and the fifth columns in the tables below is the margin between the number of psychiatric beds a hospital could have in 2014 and the IMD "Trigger Point," e.g., psychiatric census exceeds 50% of acute care census.

Table 2
Mental Health Inpatient Staffed Bed Capacity Analysis
Risk of IMD Exclusion 2004-2014 Calculated From 2004 Inpatient
Average Daily Acute Care Census*
HOSPITALS THAT CURRENTLY HAVE DEDICATED INPATIENT PSYCHIATRIC UNITS

Hospital	MHADC 2004	All Other Acute Care ADC 2004	Total MHADC 2014	Total ADC 2014	50% "Trigger Point"	Bed Margin Between MHADC and "Trigger Point"
ASSUME 10 ADDITIONAL PSYCHIATRIC BEDS						
CVH	10.2	28	20.94	48.94	24.47	3.53
FAHC	19.8	275..1	31.71	306..81	153.4	121..69
RRMC	7.1	79.8	7.96	97.26	48.63	47.67
ASSUME 16 ADDITIONAL PSYCHIATRIC BEDS						
CVH	10.2	28	26.6	54.64	27.32	0.72
FAHC	19.8	275.1	37.42	312..51	156..25	118.83
RRMC	7.1	79.8	23.16	102..96	51.48	28.32
ASSUME 20 ADDITIONAL PSYCHIATRIC BEDS						
CVH	10.2	28	30.44	58.44	29.22	-1.22
FAHC	19.8	275.1	41.21	316..31	158.15	116.94
RRMC	7.1	79.8	26.96	106.76	53.38	26.42

*Vermont Department of Health, July 26, 2006. Methodology assumes 95% utilization rate for New MH beds: 10 beds = 9.5 New MH ADC; 16 beds = 15.2 New MH ADC; 20 = 19 New MH ADC. Total Acute Care ADC = Existing MH ADC + New MH ADC + All Other Acute Care ADC. Existing MH ADC is assumed to increase 1% annually (Milliman, p 43). The numbers in the table were calculated by assuming 2004 MHADC increases 12.16% by 2014. The difference between the third and the fifth columns in the table is the margin between the number of psychiatric beds a hospital could have in 2014 and the IMD "Trigger Point"

As the table indicates only two hospitals, FAHC and RRMC, could easily expand their psychiatric bed capability by adding 10 or more new beds without triggering the IMD exclusion penalty.

While Central Vermont Medical Center would appear to be able to add 10 beds, this would bring their Total Average Daily Census by 2014 to 48.94 (of which Mental Health Average Daily Census would equal 20.94) and create a trigger point of 24.47. The bed margin before triggering the IMD exclusion would be 3.53; this would require very careful management of daily census in order to avoid the IMD classification.

Without additional study, it is difficult to know just what the margin of beds on the ADC would need to be for a particular hospital. Prudent policy would suggest that an average mental health ADC of less than 5 to 10 beds below the trigger point would be difficult to manage. While possible to implement, the practical effect of such tight margins would be to require very close and careful management of the average daily census to avoid the trigger. In effect, the psychiatric service would drive utilization management decisions.

If all other variables were equal (cost of developing and staffing a dedicated psychiatric unit and interest in doing so being the most important factors) Brattleboro Memorial Hospital, Northwestern Medical Center and Southwestern Vermont Health Care could each possibly add ten beds. Of the three hospitals, however, only Southwestern Vermont Health Care could add 16 or more beds without triggering the IMD exclusion.

However, the development of new psychiatric beds in southeastern or southwestern Vermont would not enhance geographic distribution of care. To date, none of these hospitals have expressed interest in developing psychiatric inpatient services.

Table 3
Mental Health Inpatient Staffed Bed Capacity Analysis
Risk of IMD Exclusion 2004-2014 Calculated From 2004 Inpatient Average Daily Acute Care Census*

HOSPITALS THAT CURRENTLY HAVE NO DEDICATED INPATIENT PSYCHIATRIC UNITS

Hospital	MHADC 2004	All Other Acute Care ADC 2004	Total MHADC 2014	Total ADC 2014	50% "Trigger Point"	Bed Margin Between MHADC and "Trigger Point"
ASSUME 10 ADDITIONAL PSYCHIATRIC BEDS						
Brattleboro Memorial	0.1	22.4	9.61	32.01	16	6.39
Northwestern	0	21.7	9.5	31.2	15.6	6.1
Southwestern	0.2	44.7	9.82	54.52	27.26	17.44
ASSUME 16 ADDITIONAL PSYCHIATRIC BEDS						
Brattleboro Memorial	0.1	22.4	15.3	37.81	18.9	3.6
Northwestern	0	21.7	15.2	36.9	18.45	3.25
Southwestern	0.2	44.7	15.52	60.22	30.11	14.59
ASSUME 20 ADDITIONAL PSYCHIATRIC BEDS						
Brattleboro Memorial	0.1	22.4	19.1	41.5	20.8	1.7
Northwestern	0.1	21.7	19	40.7	20.35	1.35
Southwestern	0.2	44.7	19.32	64.02	32.01	12.69

*Vermont Department of Health, July 26, 2006. Methodology assumes 95% utilization rate for New MH beds: 10 beds = 9.5 New MH ADC; 16 beds = 15.2 New MH ADC; 20 = 19 New MH ADC. Total Acute Care ADC = Existing MH ADC + New MH ADC + All Other Acute Care ADC. Existing MH ADC is assumed to increase 1% annually (Milliman, p 43). The numbers in the table were calculated by assuming 2004 MHADC increases 12.16% by 2014. The difference between the third and the fifth columns in the table is the margin between the number of psychiatric beds a hospital could have in 2014 and the IMD "Trigger Point."

f. Create Three or More 16 Bed Hospitals

The final option to avoid classification as an IMD would be to create three or more 16-bed hospitals. These would each need to be separately licensed, and have individual boards of directors and management. In order to be a program certified to participate in federal reimbursement, each program would need to meet all the requirements of a hospital. This option offers the advantages of federal reimbursement however, there are few economies of scale for operating costs and programmatic infrastructure.

4. Summary of IMD Options Analyses

As earlier stated, two key policy drivers led to the identification of the preferred scenarios outlined in this application. First, is to improve clinical care through the integration of psychiatric care with general inpatient care and by creating two new levels of inpatient services: specialized and intensive. The second policy driver is financial sustainability such that the new inpatient programs can participate in the federal Medicaid reimbursement. As such, these programs cannot be classifiable as an IMD.

a. The Possible Options

The options that result from the IMD analysis are:

- **Operate the primary and secondary programs under the license of a general hospital.** Only Fletcher Allen Health Care and Rutland Regional Medical Center are large enough to host the 50-beds we anticipate requiring.

- **Create three or more 16-bed hospitals.** There are significant feasibility issues with this option: lack of critical mass for operating efficiencies, sufficient programming, and staffing.

- **A single, state-run program classified as an IMD.** This option is significantly less clinically sound and, because of the lack of federal participation, is more expensive in terms of ongoing operations.

5. Inpatient Partner Interest

Throughout the course of the planning project the Division of Mental Health solicited the interest of all of Vermont's hospitals to provide new inpatient programs to replace VSH-level care. To date, the only hospitals that have committed to detailed exploration of the feasibility of providing such care are: Fletcher Allen Health Care, Rutland Regional Medical Center, and the Retreat Health Care.

6. Programmatic Infrastructure and Staffing Requirements

Operating psychiatric inpatient programs at the level of specialized and intensive care requires significant infrastructure in psychiatric treatment programming and specialty staffing.

Such programming requires the following attributes and characteristics.

- Ability to accept all clinically- eligible admissions (requires ongoing staffing and participation in a triage system)
- Ability to manage the most dangerous behavior safely
- Programming that meets active treatment standards for longer term admissions (in excess of 30 days)
- Diagnostic and treatment capacity for complex co-morbid conditions (both physical and mental)
- Capability to provide emergency involuntary interventions
- Ability to engage patients who may refuse to participate in treatment
- Interface with the legal system for hospitalization and in rare instances, non-emergency- involuntary medications.
- Capacity to create complex discharge plans via collaboration with community partners state-wide

The staffing requirements include psychiatrists, psychiatric nurses, and specially trained psychiatric staff (called psychiatric technicians at VSH).

The leaders of Vermont's inpatient psychiatric programs feel it will be extremely difficult for a hospital without experience in these areas to create such a program; and therefore recommended that the Division of Mental Health seek partners from among those hospitals with psychiatric inpatient expertise.

7. Summary of the Planning Considerations

Preliminary analyses of these options require consideration of costs (both construction and operating), strategies to achieve and retain adequate and sustainable financing of the system, and how best to manage the system effectively. The latter issue becomes especially significant in a zero-reject policy [3]that will require careful coordination of resources across a state-wide system. Another consideration is how to provide quality oversight, as well as how to retain, recruit and train a skilled workforce. Still another, and highly important criterion, is whether the resulting system brings together in a therapeutic environment the "critical mass" of staff, patients, and financing sufficient to support the quality improvement and care management systems necessary to provide the contemporary standard of care. Finally, even though some hospitals may have the physical beds to house expanded psychiatric capacity, they may have no staff or little interest in doing so. Willing and capable partners are a primary criterion.

The creation and the siting of new inpatient psychiatric beds require that all these different criteria be considered and balanced. The chart below delineates the various dimensions involved in selecting the design and location of the VSH replacement. Each model option is rated either "High," "Medium," or "Low," according to the likelihood that the criterion will be met. This schematic is presented without any attempt to weight or assign values to

[3] A "zero reject" policy means that all patients requiring inpatient care are admitted to the appropriate level of care in the system. No one is turned away who requires treatment and protection.

the various dimensions. The intent is simply to illustrate the complexity of the trade-offs involved in settling on a particular design.

Table 4 Criterion by Program Design Options

Criteria	**Single Program State Run**	**Single Program Privately Operated (FAHC)**	**Primary Program W/ 1 or 2 Local Hospital Enhancements (FAHC & RRMC & Retreat Health Care**	**Multiple Programs With 3 or More 16- Bed Independently Operated Hospitals**
Avoids Classification of IMD (Federal Reimbursement)	LOW	HIGH	HIGH	MEDIUM
Management Accountability & Feasibility	HIGH	HIGH	HIGH – MEDIUM	LOW
Retain Current Workforce	HIGH	HIGH-MEDIUM	MEDIUM	LOW
Attract Future Workforce	MEDIUM	HIGH	HIGH	LOW
Capitol Construction Costs	LOW	HIGH	HIGH	MEDIUM
Ongoing Operating Costs	HIGH	MEDIUM	MEDIUM	HIGH
Improved Geographic Access	LOW	LOW	MEDIUM	HIGH
Consistency with Stakeholder Recommendations	LOW	MEDIUM	HIGH	LOW
Willing and Capable Partners	NA	HIGH	HIGH	LOW
Integration of Mental Health & Health Services	LOW	HIGH	HIGH	MEDIUM
System Design Creates “Critical Mass”	HIGH	HIGH	MEDIUM	LOW

As Table 4 indicates, preliminary consideration of the dimensions that must be balanced suggests that Fletcher Allen Health Care and Rutland Regional Memorial Hospital present the best option for partnering to develop new psychiatric inpatient programs integrated with other medical services.

Preferred In Patient Options for Further Analysis

The options that best meet the twin goals of integration with general health care and avoidance of the IMD trigger are to develop the preponderance of beds with FAHC and RRMC. Therefore, the Futures Plan proposes to develop more detailed feasibility analysis of the following options.

Under the license of Fletcher Allen Health Care (FAHC):

1. Create a 40-bed stand alone psychiatric hospital on or off the Burlington campus.
2. Create a 40-bed program that is physically integrated with FAHC's existing inpatient services.
3. Create a 68 bed inpatient program combining FAHC's current 28-bed program with 40 new beds physically integrated with the inpatient services.

and

Under the license of Rutland Regional Medical Center (RRMC):

4. Establish 6 new psychiatric inpatient beds with the current program at Rutland Regional Medical Center via renovations and/or new construction to optimize current inpatient programming and bed capacity.

and

Under the license of Retreat Healthcare:

5. Establish the capability to provide up to four psychiatric inpatient beds at the specialized level of care at the Retreat Health Care.

If developing new capacities at Rutland Regional Medical Center or the Retreat Health Care does not prove feasible, the number of beds planned for the primary program with FAHC could be increased.